

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) Waste disposal site for storing waste and residues of solid organic or inorganic substances, composites and mixtures thereof,

 ~~characterized in that~~ wherein,

 arranged in the ground (22) is a trough (12) comprising a trough bottom (14) and side walls (15), the trough bottom of which contains at least two water-tight layers (B, C) with constituents of a ceramic binder system (CBS).
2. (currently amended) Waste disposal site according to Claim 1, ~~characterized in that~~ wherein arranged flat between the top water-tight layer (C) and the waste material (24, 24_a) is at least one water-tight plastic film (26).
3. (currently amended) Waste disposal site according to Claim 2, ~~characterized in that~~ wherein compacted debris is stored as waste material (24_a) on the plastic film (26).
4. (currently amended) Waste disposal site according to ~~any of Claims 1 to 3,~~ characterized by Claim 1, wherein an angle (w) of 90° to 150°, preferably about 130°, between trough bottom (14) and side wall (15).
5. (currently amended) Waste disposal site according to ~~any of Claims 1 to 4,~~ characterized in that Claim 1, wherein the trough bottom (14) is inclined at an angle of up to about

10° with respect to the horizontal.

6. (currently amended) Waste disposal site according to ~~any of Claims 1 to 5, characterized by Claim 1,~~ wherein a covering (20) which contains at least two water-tight layers (B, C) on which there is arranged at least one seepage layer (D) for dissipating rainwater.
7. (currently amended) Waste disposal site according to Claim 6, ~~characterized in that~~ wherein the seepage layer (D) is provided with drainage (28).
8. (currently amended) Waste disposal site according to ~~Claim 6 or 7, characterized in that~~ Claim 6, wherein the seepage layer (D) is superposed by a humus layer (E) which possibly bears a thin slurry layer (F) as erosion protection.
9. (currently amended) Waste disposal site according to ~~any of Claims 1 to 8, characterized by Claim 1,~~ wherein an inorganic binder, provided in the water-tight layers (B, C), for hydraulic setting compounds in which substances containing silica, alumina, iron oxides and/or lime are mixed, ground and burned until they are sintered.
10. (currently amended) Waste disposal site according to ~~any of Claims 1 to 9, characterized in that~~ Claim 9, wherein the binder system comprises a liquid phase and a solid phase, the latter consisting of very fine-grained hydraulic binder and calcium hydroxide and also up to 10%, preferably about 4%, of organic component.
11. (currently amended) Waste disposal site according to Claim 10, ~~characterized in that~~ wherein the liquid phase is a mixture of monomolecular and polymolecular surface-active substances, solubilizers, emulsifiers and catalysts having a content of propylenediamine, dimethyl ammonium chloride and

isopropyl alcohol.

12. (currently amended) Waste disposal site according to ~~at least one of the preceding claims, characterized in that~~ Claim 1, wherein an irreversible agglomeration of the fine and very fine particles of the treated layer is produced by means of the ceramic binder system, with a high degree of compacting of the bottom fraction associated with the binder system.
13. (currently amended) Waste disposal site according to ~~at least one of the preceding claims, characterized in that~~ Claim 2, wherein the waste (24, 24_a) or other such substances stored in the an interior (18) thereof are bound by adding mineral components, in particular by means of the ceramic binder system (CBS).
14. (canceled).
15. (currently amended) Method of treating waste and residues of solid organic or inorganic substances, composites and mixtures thereof, in particular fractions of a waste disposal site according to ~~at least one of the preceding claims, characterized in that~~ Claim 1, wherein the waste, in particular domestic waste, is dewatered, separated from contained biomass and then a separation of metal/plastics takes place, these being recycled into industrial cycles as secondary raw materials.
16. (currently amended) Method according to Claim 15, ~~characterized in that~~ wherein, prior to introducing the waste into the waste disposal site, said waste is bound by adding mineral components and its intrinsic binding forces are activated.

17. (currently amended) Method according to Claim 15 ~~or 16,~~
~~characterized in that~~ , wherein harmful substances in the
waste are immobilized.
18. (currently amended) Method according to any of Claims 15 ~~to~~
~~17, characterized by~~ , wherein a separation of residues,
following which separated-out mineral substances and/or
specially fed-in slag or ashes are processed to form a
ceramic binder.
19. (currently amended) Method according to ~~any of Claims 15 to~~
~~18, characterized by~~ Claim 15, wherein the main fraction
produced as this is carried out, in the form of:
 - water;
 - biomass/compost/biogas;
 - metals such as Al, Fe, Cu metals or the like;
 - residual waste fractions;
 - residues.
20. (currently amended) Method according to Claim 19,
~~characterized in that~~ wherein mineral substances from the
residual waste fraction and/or from the residues and/or from
the ultimately produced ash are used as raw material to
produce the binder (CBS).
21. (currently amended) Method according to ~~any of Claims 18 to~~
~~20, characterized in that~~ Claim 20, wherein slag is sieved
off and is mixed with slag sand and/or power station ash
and/or tectosilicates during a comminution operation.
22. (currently amended) Method according to ~~at least one of~~
~~Claims 15 to 21, characterized in that~~ Claim 21, wherein in
the composite or mixture the constituents are broken down or
split by means of a pulse using a device which suddenly
interrupts the flow of said composite or mixture.

23. (currently amended) Method according to Claim 22, ~~characterized in that~~ wherein process air is fed in, in a rising flow path, in the opposite direction to the conveying path generated downwards in a spiral-like manner in a rotor (26) with a vertical axis.
24. (currently amended) Method according to Claim 23, ~~characterized in that~~ wherein a shockwave is generated on an impact wall of the rotor between the layers of the composite.
25. (currently amended) Method according to Claim 23 ~~or 24,~~ ~~characterized in that~~ , wherein two wall surfaces arranged coaxially and at a radial distance to one another rotate relative to one another about their axis and the composites or mixtures moved by centrifugal forces are moved and broken down between impact surfaces projecting from the impact walls.
26. (currently amended) Method according to ~~any of Claims 15 to 25,~~ ~~characterized in that~~ Claim 25, wherein the composite (10) is broken down when it collides with an impact wall (20) and its metal constituents are shaped into spheres, wherein possibly the layered metal constituent is rolled up during the shaping operation.
27. (currently amended) Method according to ~~any of Claims 15 to 26,~~ ~~characterized in that~~ Claim 26, wherein the composite is subjected to a prior heat treatment before the splitting or breakdown operation, wherein possibly the discharge from the splitting or breakdown operation is subjected to a separation and/or sieving operation and/or to a cracking-off operation for non-iron metals.
28. (currently amended) Method according to ~~any of Claims 15 to 27,~~ ~~characterized in that~~ Claim 15, wherein the metal and/or

plastic parts are compacted following separation and possibly extruded following separation.

29. (currently amended) Method according to ~~any of Claims 15 to 28, characterized in that~~ Claim 15, wherein the plastics are separated from one another by turbolaminar separation and/or identification.
30. (canceled).
31. (currently amended) Apparatus for carrying out the method according to ~~at least one of Claims 22 to 29, characterized in that~~ Claim 22, wherein the conveying path (q) for the composites (82) or the mixture is fed into the interior (94) of a rotor (92) in the opposite direction to that of the flow path (t) of process air.
32. (currently amended) Apparatus according to Claim 31, ~~characterized in that~~ wherein the material supply (96) is arranged in the ridge region of the rotor (92)
33. (currently amended) Apparatus according to Claim ~~20 or~~ 32, ~~characterized in that~~ wherein the conveying path (t) runs between two wall surfaces (90, 90_a) that can be moved relative to and at a distance (g) from one another, from which wall surfaces impact surfaces (90, 90_a) that are offset with respect to one another project on either side into the conveying path.
34. (currently amended) Apparatus according to Claim 33, ~~characterized in that~~ wherein the wall surfaces (90, 90_a) are coaxially curved.
35. (currently amended) Apparatus according to Claim 33 ~~or 34,~~ ~~characterized in that~~ , wherein the wall surfaces (90, 90_a) are mounted such that they can rotate in the rotation

direction (y_1) of the rotor (92).

36. (currently amended) Apparatus according to ~~at least one of Claims 31 to 35, characterized by~~ 35, wherein at least one further feature disclosed in the description and/or drawing.